# Overview documentation: Papers, presentations, and tutorials

- Our <u>Parallel NetCDF API</u> (PDF, 152k) document describes the API we are using. We have tweaked the programming interface to be more friendly to parallel i/o while maintaining file format compatibility with the serial version of NetCDF.
- Our (<u>SC2003 Paper</u> about PnetCDF (PDF, 97k) discusses our library and presents some performance results.
- Jianwei Li's presentation (PDF, 167k) from the SC2003 conference.
- <u>Unidata's serial NetCDF documentation</u> sometimes comes in handy for comparison.
- A <u>QuickTutorial</u> demonstrating some simple aspects of the library, with full code examples.

### **Tuning**

- <u>HintsForPnetcdf</u> describes some low-level tuning parameters
- <u>VariableAlignment</u> documents a way to adjust the layout of file header and variables in a dataset, and why/when you might want to do so
- <u>CombiningOperations</u> documents an optimization introduced in version 1.1: when waiting for completion of non-blocking operations, the library will combine all pending operations into one bigger I/O request.
- <u>BufferedInterface</u> documents our newest API addition: the non-blocking routines copy data to a user-provided buffer.

## Hacking

- start with <u>SourceCodeWalkthrough</u>
- ProjectIdeas?
- <u>TestCoverage</u>
- <u>DesignDiscussions</u>: we discuss the design of pnetcdf over email mostly. We try to collect the highlights here.

#### **Release Notes**

- ReleaseNotes-1.3.1 (released on 24 September 2012)
- ReleaseNotes-1.3.0 (released on 26 June 2012)
- ReleaseNotes-1.2.0 (released on 19 August 2010)
- ReleaseNotes-1.2.0pre1 (released on 15 June 2010)
- ReleaseNotes-1.1.1 (released on 27 January 2010)
- ReleaseNotes-1.1.0 (released on 2 November 2009)
- ReleaseNotes-1.1.0pre1

#### **Others**

- NetCDF-4 can use PnetCDF. We think this is great. More information: PnetcdfAndNetcdf4
- Forrest Hoffman wrote an article about PnetCDF in the July 2004 issue of Linux Magazine.
- The HDF group at NCSA ported a serial NetCDF code to one using PnetCDF. They posted <u>a writeup</u> of their efforts . It's a little old but does provide some additional information to supplement doc/porting\_notes.txt